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November 10, 2020

Jocelyn Boyd
Chief Clerk and Administrator
South Carolina Public Service Commission
Synergy Business Park, The Saluda Building
101 Executive Center Drive
Columbia SC 29210

Re: South Carolina Energy Freedom Act (House Bill 3659) Proceeding Related to S.C. Code Ann. Section 58-37-40 Integrated Resource Plans for Lockhart Power Company
Docket No. 2019-227-E

Dear Ms. Boyd:

Attached for filing on behalf of Lockhart Power Company ("LPC") please find the Rebuttal Testimony of Bryan D. Stone in the above referenced docket.

Thank you for your assistance in this matter.

Very truly yours,

Margaret M. Fox

MMF/khh

cc: Jeffrey M. Nelson (via Email jnelson@ors.sc.gov)
Andrew Bateman (via Email abateman@ors.sc.gov)

Attachment

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2019-227-E

IN RE:

South Carolina Energy Freedom Act	)
(House Bill 3659) Proceeding Related	)
To S.C. Code Ann. Section 58-37-40	)
Integrated Resource Plans for Lockhart	)
Power Company	)
_____	)

REBUTTAL TESTIMONY OF BRYAN D. STONE

Q. Please state your name, business address, and occupation.

A. My name is Bryan D. Stone. I am President of Lockhart Power Company ("LPC" or the "Company"). My business address is PO Box 10, 420 River Street, Lockhart, South Carolina 29364.

Q. Please describe your professional background.

A. I have been the head of Lockhart Power Company for 14 years. Prior to that, I worked for 16 years in the heavy manufacturing industry, with responsibilities in engineering, maintenance, and power management for very large retail industrial load customers and renewable energy generators.

Q. Would you please provide a brief overview of your rebuttal testimony?

A. Yes. First, I will provide a brief overview of several key LPC characteristics that must be understood in order to appropriately apply the statutory requirements of Section 58-37-40 ("Section 40") to its IRP. Then I will individually address each of the five (5) near-term South Carolina Office of Regulatory Staff ("ORS") recommendations filed in

the direct testimony of Anthony M. Sandonato. Finally, I will address the five (5) longer-term ORS recommendations as a group.

Q. Please summarize Lockhart Power's key characteristics which differentiate it from the other South Carolina investor owned utilities (IOU's), as relevant to the IRP process.

A. There are several described in more detail in my direct testimony, including LPC's small size, full requirements power purchase agreement with Duke Energy ("Duke PPA"), and renewable energy profile. The Company is very small for an IOU, estimated to be roughly 1% of the size of other South Carolina IOU's, depending on the type of comparison. One result is that LPC cannot cost effectively provide a diversified generation portfolio to serve and balance its entire load. It has therefore historically used a long-term Duke PPA to provide highly reliable power for its customers at a reasonable cost. In addition, LPC owns several generation resources, from which essentially 100% of the power generated is from renewable resources – it has no coal, nuclear, or natural gas generation resources.

Q. Are these key characteristics significant in relation to the IRP process?

A. Yes. Both the Commission and ORS have recognized that LPC's unique characteristics present challenges in relation to the IRP process. As mentioned in the ORS Exhibit AMS-1 (Page 8), the Commission stated in Docket No. 93-430-E that "Essentially, Lockhart has unique problems" that "presented a unique situation for the development of an [IRP]." Likewise, ORS states in Exhibit AMS-1 (Page 12) that "…it is clear that due to the nature of the Company's system some of the requirements of Section 40 are difficult to apply to LPC's system…."

Q. What is the implication of these significant key characteristics with regard to the IRP process?

A. While Section 40 does apply to LPC, in certain specific areas it cannot be applied in the same way as for other IOU's. In essence, it is like trying to fit the proverbial square peg into a round hole.

Q. What is the Company's goal for its IRP?

A. The Company's goal is to meet the Section 40 statutory requirements as applicable to and appropriate for its unique situation.

Q. Does the IRP achieve this goal?

A. Yes, I believe it does. To the extent clarifying language may be necessary in some areas (as discussed herein), LPC is certainly willing to modify its IRP to include those clarifications.

Q. Please provide a brief overview of the ORS testimony.

A. The ORS's Anthony M. Sandonato filed five (5) pages of direct testimony and a 34-page exhibit AMS-1 (the "Report"). Mr. Sandonato states that the Report was developed by a company providing consulting services for the ORS, and two of the consulting services company employees also provided direct testimony in relation to the Report. In Mr. Sandonato's testimony (Page 5, line 1) he provides five (5) ORS recommendations for actions that LPC should take immediately to modify its IRP. He also states that "ORS also recommends additional modifications be made to future LPC IRP filings." (Page 4, line 23).

Q. What is the first ORS recommended immediate action?

A. Item 1 states "The Company should develop long-term forecasts of sales and peak demand under various reasonable scenarios, which typically include low, medium, and high forecasts. 40(B)(1)(a)"

Q. Did LPC meet the requirements of Section 40(B)(1)(a)?

A. Yes, to the extent applicable to LPC. As stated in my direct testimony (Pg. 4, line 17), the IRP Attachments 2 & 3 show a reasonable sales and peak demand forecast. Since under any conceivable low or high forecast the Company would meet the deviation automatically simply by buying less or more power via the Duke PPA, there is no purpose in providing alternate scenarios, other than possibly to "check the box" of the statutory language in this section. This is one example of "square peg, round hole" mentioned above.

Q. Has LPC prepared alternate scenarios of sales and peak demand forecasts in response to the ORS recommendation in Item 1?

A. Yes, for the sake of regulatory efficiency and in order to address ORS's concern, LPC has created two additional versions of Attachments 2 (peak demand forecast) and 3 (sales forecast) to show light load and high load alternative forecasts. See attached Exhibit BDS-1. The original base case Attachments 2 and 3 have also been amended to reflect the addition of a new large industrial customer, which is expected to begin production in 2021.

Q. Is the addition of this new customer load noteworthy?

A. Yes, and this new customer load highlights another area in which LPC's small size makes applying the IRP statutory requirements challenging. The ORS Report includes five pages (page 22-26) of consultant analysis regarding LPC's load and energy forecasting,

using an approach that would be considered generally reasonable if applied to a typical IOU. The analysis focuses on projected growth percentages used by LPC and whether or not they comport with historic growth rates. What the analysis does not address is the disproportionate impact that one large customer can have on LPC's relatively small load. For example, the new customer being added is projected to have a significant demand – more than 100 times the historically-achieved annual growth rate for LPC. Put differently, adding this one customer would represent more than 100 years of forecast growth, if the Company based its forecast solely on historic growth. With typical IOU's, their load is so large that adding or losing a large customer would be barely noticeable in the context of their system; by comparison, LPC's largest industrial customers can represent approximately 10% of its total system load.

Q. Are there any other noteworthy observations regarding this new customer?

A. Yes, one other observation is that the addition of the new large customer highlights the flexibility inherent to LPC's resource portfolio strategy. The Company is able to add large loads very quickly by leveraging Duke Energy's much larger system. It is difficult to envision a typical IOU being able to increase its load as LPC can by 10%, 25%, or even 50% within a one-year period without experiencing major resource challenges.

Q. What is the second ORS recommended immediate action?

A. Item 3 (for reference, Item 2 is on the longer-term list of recommendations) states "The Company should develop several resource portfolios (low, medium, and high) to evaluate the range of demand-side, supply-side, storage and other technologies available to meet its load requirements. 40(B)(1)(b) and 40(B)(1)(e)"

Q. Did LPC meet the requirements of Sections 40(B)(1)(b) and 40(B)(1)(e)?

A. Yes, to the extent applicable to LPC. Most IOU's, including others in South Carolina, have a mix of generation resources to serve base, intermediate, and peaking loads, including a reserve margin. LPC uses the Duke PPA to leverage Duke's generation mix to match the Company's load under all load scenarios. The Company has no requirement for additional or alternative resources to serve its load. However, LPC has pursued specific renewable generation projects over time in order to minimize the reliance upon a third party's generation, reduce its exposure to fossil fuel-related cost risk and environmental liability risk, and generally better position LPC to control its own long-term destiny.

Regarding Section 40(B)(1)(b), the requirement that an IRP include the generation type and capacity for a *proposed* generation facility, as stated in my direct testimony (page 5, line 6) LPC "is not proposing to add generation facilities to its retail operations at this time;" thus, this requirement has been met. Regarding Section 40(B)(1)(e), the requirement that an IRP include several resource portfolios to evaluate the range of options available to meet the utility's obligations, including an evaluation of low, medium and high cases for the adoption of renewable energy and other measures, my direct testimony also addresses this requirement (Page 6, line 11). Due to LPC's small size, it is obviously not possible for it to utilize typical utility-scale generation resources to create a diversified generation portfolio to balance its load. The Company has therefore entered into a full requirements contract with Duke Energy that provides this

function, and LPC does not envision a practical alternative within the 15-year IRP planning horizon to some type of full requirements PPA.

The Duke PPA allows LPC a limited ability to add renewable resources and demand-side management and energy efficiency programs. The Company has increased the number of its renewable energy facilities serving retail load prior to its last rate case in 2013, and implemented demand-side management to the extent it has identified economic opportunities to do so. Due to LPC's small size and PPA restrictions, these opportunities are rare. As stated in the IRP (Item 16), LPC continues to monitor solar generation market changes (including dropping solar prices) while keeping its limited options open regarding new solar resources. Currently, there are no proposed further additions of individual resources to serve LPC's retail load, not to mention portfolios of resources such as larger IOU's would typically propose.

While this IRP requirement to develop several resource portfolios makes sense for a typical IOU that must balance its own load under any reasonable scenario and identify the best path forward toward higher renewable energy penetration levels within their portfolios, it does not make sense for LPC. The Company already generates 100% of the energy from its own resources using renewables, so it has achieved the statutory "high case" for the adoption of renewable energy, and it would not consider going backward toward a low or medium case. The Company cost effectively supplies the remainder of its load via the full requirements Duke PPA, which does not expire for more than eight (8) years. While the Company continues to search for additional resource alternatives,

including monitoring the continuing decline in solar and battery prices, at this time it has not identified any specific projects that meet its high-level screening requirements to merit inclusion in its IRP.

Q. Please describe LPC's high-level screening process for potential resources.

A. As potential resources are identified, the Company applies a straightforward informal screening process as appropriate for each resource. Typical considerations include the type and scale of the resource, the economic impact on customers and the company, risk profile, timing, and treatment under the Duke PPA. If a potential resource passes through this screening process, it would be subject to more detailed analysis before deciding whether to proceed. The Company believes this general screening process is consistent with the intent of Section 40, or else utility IRP's would be cluttered with information about potential projects without serious potential.

Q. Is it appropriate to analyze the Duke PPA renewal at this time as part of a possible alternative resource portfolio?

A. No. That would be premature, since the Duke PPA does not expire for more than eight (8) years, at the end of 2028.

Q. What is the third ORS recommended immediate action?

A. Item 4 states "The Company should include a more detailed discussion of DSM in its IRP, including the historically achieved and projected energy and peak impacts. 40(B)(1)(e)(i) and 40(B)(1)(i)"

Q. Did LPC meet the requirements of 40(B)(1)(e)(i) and 40(B)(1)(i)?

A. Yes, to the extent applicable to LPC. Section 40(B)(1)(e)(i) relates to the IRP requirement to include "…consideration of the following… (i) Customer energy

efficiency and demand response programs". The IRP includes such consideration in Item 4, numbers 1-7. The IRP Item 6 describes an additional demand-side management program. The statute does not specify the level of detail required, and the Company believes it has met the statutory requirement of this section. Furthermore, from a practical standpoint, the historical and projected impacts of these various measures recommended by the ORS would be extremely difficult to measure, since they have been part of our rate structure for many years. However, any new LPC energy efficiency and demand response programs proposed in the future could include such a projected impact.

Section 40(B)(1)(i) relates to the IRP requirement that includes "…details regarding the amount of peak demand reduction the utility expects to achieve…" The Report states:

> "LPC did not comply with the requirement to provide the amount of peak demand reduction that it expects to achieve. Although, with respect to the rate design measures the Company has implemented, Mr. Stone stated that 'LPC does not expect a significant reduction in demand…' will be achieved." (Pg. 17, para. 1).

The Report apparently misinterpreted the quoted portion of my direct testimony. The quoted language "LPC does not expect a significant reduction in demand" was in reference to the amount of peak demand reduction the Company expects to achieve, in relation to its current demand which includes the impacts of previously implemented measures. Since the Company has not identified and is not proposing any new energy efficiency or demand response programs, it cannot provide details regarding associated peak demand reductions.

Q. What is the fourth ORS recommended immediate action?

A. Item 5 states "The Company should include an evaluation of low, medium, and high fuel prices and environmental regulations (primarily CO_2 costs) in order to evaluate its DEC PPA costs. 40(B)(1)(e)(iii)"

Q. Did LPC meet the requirements of Section 40(B)(1)(e)(iii)?

A. Yes, to the extent applicable to LPC. Section 40(B)(1)(e) is the requirement for an IRP to include several resource portfolios, which is discussed above in the ORS's second recommendation (Item 3) and my response. Subpart (iii) is the requirement that such resource portfolios include consideration of "sensitivity analyses related to fuel costs, environmental regulations, and other uncertainties or risks". Since as discussed above, LPC has not proposed "low" and "medium" case resource portfolios (because it has already adopted a very high level of renewable generation resources), this subpart is not applicable to this iteration of the Company's IRP. The ORS apparently takes the position that this requirement should also apply to the Company's current resource portfolio (another instance of square peg, round hole). Without arguing the legitimacy of this position, I actually did address this issue in my direct testimony (Page 7, line 8). To summarize, LPC's generation resource portfolio is uniquely positioned to absolutely minimize both fuel cost and environmental regulatory risk, since virtually 100% of the energy we generate is from renewable resources. While there is some amount of such risk associated with the Duke PPA, regarding this risk, that risk will presumably be evaluated in the context of the Duke IRP. LPC has no control over Duke's fuel costs and environmental regulatory risk.

In this regard, the ORS's Report (Page 29) suggests various ways in which the Company could have evaluated fuel price forecasts and environmental regulations as related to Duke's system, from the outside looking in. The Company disagrees, because it believes that Duke is more capable of evaluating its own risk profile under the portfolios it will propose, but which LPC has not yet seen, than LPC. Also, Duke annually provides the Company an updated five-year forecast of its rates, which presumably includes Duke's best estimate of fuel cost and environmental regulatory risk.

Q. Does the Company have an update regarding the Wellford Landfill Gas facility PPA?

A. Yes. The Company entered into this 10-year PPA to sell power from the facility to Duke Energy, because at the time that provided the most value for LPC's customers. Based on current market prices, the most cost-effective option for customers is to allow the PPA to expire at the end of 2020, and use the power to directly serve customers.

Q. What is the fifth ORS recommended immediate action (Item 6)?

A. Item 6 states "The Company should develop a method of conducting resource evaluations as part of its IRP to compare its proposed plan to other reasonable options under different load, fuel, and risk sensitivities. This is necessary in order to compare net benefits of different resource plans. 40(B)(1)(g), and 40(B)(1)(h)"

Q. Did LPC meet the requirements of Sections 40(B)(1)(g) and 40(B)(1)(h)?

A. Yes, to the extent applicable to LPC. Subsection (g) relates to proposed resource portfolios, and subsection (h) relates to cost analysis and reliability impacts of all options to meet energy and capacity needs. As previously stated, LPC is not proposing resource portfolios, or even individual resource additions or options, so this requirement does not apply to this iteration of the Company's IRP. The ORS recommendation appears to be

that LPC should develop a method to compare options that don't exist. Due to the Company's unique characteristics, the Company's approach is instead to use a method of comparing resource options that have passed the screening process that is appropriate and specific to the options being compared. This would typically involve an economic evaluation and risk analysis, at a minimum.

Q. What comments does LPC have regarding the five (5) longer-term ORS recommendations, listed as "Recommendations for a Future IRP" in Mr. Hayet's testimony (Page 7, before line 1)?

A. As the ORS recognizes in various places throughout Mr. Hayet's testimony and the Report, these recommendations could be addressed over a longer term, "no later than the next comprehensive IRP in 2023" (Hayet Page 5, line 14-15). Without weighing in on the appropriateness of these longer-term recommendations at this time, the Company agrees to consider these recommendations no later than the next comprehensive IRP. The Company requests that the Commission take no action on these longer-term recommendations at this time.

Q. You stated that LPC is willing to modify its IRP as filed to include clarifications if necessary, and indicated in this testimony several items that might be clarified. Would you please summarize those clarifications?

A. Yes. Regarding ORS's recommendation 1, I would include the Attachments 2 and 3 for various reasonable scenarios as attached hereto, including the addition of a new large industrial customer as described in my testimony. With respect to ORS's second recommendation (Item 3), I would include some high-level language regarding how LPC evaluates prospective new generation resources (although the current IRP does not

identify any such specific resources). For ORS recommendation 4 (Item 5), I would include a statement saying that LPC's renewable portfolio has negligible fuel cost and environmental risk, and that Duke's cost and risk (as they relate to LPC) will be evaluated in the context of the next Duke PPA renewal. Finally, I would amend Revised Attachment 1 to reflect that LPC does not intend to renew its PPA with Duke for the Wellford Landfill Gas facility when it expires at the end of this year, but that LPC will instead use that power to directly serve customers.

Q. Does this conclude your rebuttal testimony?

A. Yes.

EXHIBIT BDS-1

DOCKET NO. 2019-227-E & 2020-11-E
ORDER NO. 94-348 & 98-502

LOCKHART POWER COMPANY
Base Load Case

SUMMER DEMAND FORECAST

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
SYSTEM SUMMER PEAK															
DEMAND IN MW'S															
SYSTEM PEAK DEMAND	67.4	73.4	74.1	74.9	75.6	76.4	77.1	77.9	78.7	79.5	80.3	81.1	81.9	82.7	83.5

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
DEMAND SOURCES															
LOCKHART HYDRO GENERATION	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
PACOLET DIESEL GENERATION	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
UNION DIESEL GENERATION	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
PURCHASES FROM DUKE ENERGY	37.6	43.6	44.3	45.1	45.8	46.6	47.3	48.1	48.9	49.7	50.5	51.3	52.1	52.9	53.7
TOTAL DEMAND SOURCES	67.4	73.4	74.1	74.9	75.6	76.4	77.1	77.9	78.7	79.5	80.3	81.1	81.9	82.7	83.5

WINTER DEMAND FORECAST

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
SYSTEM WINTER PEAK															
DEMAND IN MW'S															
SYSTEM PEAK DEMAND	62.6	68.6	69.3	70.0	70.7	71.4	72.1	72.8	73.5	74.3	75.0	75.8	76.5	77.3	78.1

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
DEMAND SOURCES															
LOCKHART HYDRO GENERATION	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
PACOLET DIESEL GENERATION	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
UNION DIESEL GENERATION	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
PURCHASES FROM DUKE ENERGY	32.8	38.8	39.5	40.2	40.9	41.6	42.3	43.0	43.7	44.5	45.2	46.0	46.7	47.5	48.3
TOTAL DEMAND SOURCES	62.6	68.6	69.3	70.0	70.7	71.4	72.1	72.8	73.5	74.3	75.0	75.8	76.5	77.3	78.1

Note: LPC generation resources that provide off-system sales per long-term contracts are excluded.

ATTACHMENT 2

DOCKET NO. 2019-227-E & 2020-11-E
ORDER NO. 94-348 & 98-502

LOCKHART POWER COMPANY
High Load Case

SUMMER DEMAND FORECAST

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
SYSTEM SUMMER PEAK															
DEMAND IN MW'S															
SYSTEM PEAK DEMAND	67.4	73.4	77.1	80.9	85.0	89.2	93.7	98.4	103.3	108.4	113.9	119.6	125.5	131.8	138.4

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
DEMAND SOURCES															
LOCKHART HYDRO GENERATION	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
PACOLET DIESEL GENERATION	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
UNION DIESEL GENERATION	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
PURCHASES FROM DUKE ENERGY	37.6	43.6	47.3	51.1	55.2	59.4	63.9	68.6	73.5	78.6	84.1	89.8	95.7	102.0	108.6
TOTAL DEMAND SOURCES	67.4	73.4	77.1	80.9	85.0	89.2	93.7	98.4	103.3	108.4	113.9	119.6	125.5	131.8	138.4

WINTER DEMAND FORECAST

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
SYSTEM WINTER PEAK															
DEMAND IN MW'S															
SYSTEM PEAK DEMAND	62.6	68.6	72.0	75.6	79.4	83.4	87.6	91.9	96.5	101.4	106.4	111.7	117.3	123.2	129.4

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
DEMAND SOURCES															
LOCKHART HYDRO GENERATION	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
PACOLET DIESEL GENERATION	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
UNION DIESEL GENERATION	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
PURCHASES FROM DUKE ENERGY	32.8	38.8	42.2	45.8	49.6	53.6	57.8	62.1	66.7	71.6	76.6	81.9	87.5	93.4	99.6
TOTAL DEMAND SOURCES	62.6	68.6	72.0	75.6	79.4	83.4	87.6	91.9	96.5	101.4	106.4	111.7	117.3	123.2	129.4

Note: LPC generation resources that provide off-system sales per long-term contracts are excluded.

ATTACHMENT 2

DOCKET NO. 2019-227-E & 2020-11-E
ORDER NO. 94-348 & 98-502

LOCKHART POWER COMPANY
Light Load Case

SUMMER DEMAND FORECAST

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
SYSTEM SUMMER PEAK															
DEMAND IN MW'S															
SYSTEM PEAK DEMAND	67.4	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
DEMAND SOURCES															
LOCKHART HYDRO GENERATION	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
PACOLET DIESEL GENERATION	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
UNION DIESEL GENERATION	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
PURCHASES FROM DUKE ENERGY	37.6	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4
TOTAL DEMAND SOURCES	67.4	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2

WINTER DEMAND FORECAST

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
SYSTEM WINTER PEAK															
DEMAND IN MW'S															
SYSTEM PEAK DEMAND	62.6	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
DEMAND SOURCES															
LOCKHART HYDRO GENERATION	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
PACOLET DIESEL GENERATION	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
UNION DIESEL GENERATION	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
PURCHASES FROM DUKE ENERGY	32.8	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6
TOTAL DEMAND SOURCES	62.6	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4

Note: LPC generation resources that provide off-system sales per long-term contracts are excluded.

ATTACHMENT 2

ATTACHMENT 3

Docket NO. 2019-227-E & 2020-11-E
Order NO. 94-348 & 98-502

LOCKHART POWER COMPANY
Base Load Case

SUPPLY AND SALES FORECAST (MWH)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
System Requirements															
Metered Sales	339,277	370,813	374,521	378,266	382,049	385,869	389,728	393,625	397,562	401,537	405,553	409,608	413,704	417,841	422,020
Company Use	852	852	852	852	852	852	852	852	852	852	852	852	852	852	852
Losses	19,165	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947	20,947
Required System Input	359,294	392,612	396,320	400,066	403,848	407,669	411,528	415,425	419,361	423,337	427,352	431,408	435,504	439,641	443,819

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Supply Sources															
Lockhart Hydro Generation	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121
Pacolet Diesel Generation	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
Union Diesel Generation	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Purchases from Duke	283,118	316,436	320,144	323,890	327,672	331,493	335,352	339,249	343,185	347,161	351,176	355,232	359,328	363,465	367,643
Total Supply	359,294	392,612	396,320	400,066	403,848	407,669	411,528	415,425	419,361	423,337	427,352	431,408	435,504	439,641	443,819

Note: Under the current Duke Energy PPA, the Pacolet and Union Diesel Generation stations are only operated in emergency situations.

ATTACHMENT 3

Docket NO. 2019-227-E & 2020-11-E
Order NO. 94-348 & 98-502

LOCKHART POWER COMPANY
High Load Case

SUPPLY AND SALES FORECAST (MWH)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
System Requirements															
Metered Sales	339,277	370,813	389,354	408,821	429,262	450,726	473,262	496,925	521,771	547,860	575,253	604,015	634,216	665,927	699,223
Company Use	852	852	852	852	852	852	852	852	852	852	852	852	852	852	852
Losses	19,165	20,947	21,995	23,094	24,249	25,462	26,735	28,071	29,475	30,949	32,496	34,121	35,827	37,618	39,499
Required System Input	359,294	392,612	412,200	432,768	454,364	477,039	500,849	525,848	552,098	579,660	608,601	638,988	670,895	704,397	739,575

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Supply Sources															
Lockhart Hydro Generation	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121
Pacolet Diesel Generation	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
Union Diesel Generation	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Purchases from Duke	283,118	316,436	336,024	356,592	378,188	400,863	424,673	449,672	475,922	503,484	532,425	562,812	594,719	628,221	663,399
Total Supply	359,294	392,612	412,200	432,768	454,364	477,039	500,849	525,848	552,098	579,660	608,601	638,988	670,895	704,397	739,575

Note: Under the current Duke Energy PPA, the Pacolet and Union Diesel Generation stations are only operated in emergency situations.

ATTACHMENT 3

Docket NO. 2019-227-E & 2020-11-E
Order NO. 94-348 & 98-502

LOCKHART POWER COMPANY
Light Load Case

SUPPLY AND SALES FORECAST (MWH)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
System Requirements															
Metered Sales	339,277	364,506	364,506	364,506	364,506	364,506	364,506	364,506	364,506	364,506	364,506	364,506	364,506	364,506	364,506
Company Use	852	852	852	852	852	852	852	852	852	852	852	852	852	852	852
Losses	19,165	20,583	20,583	20,583	20,583	20,583	20,583	20,583	20,583	20,583	20,583	20,583	20,583	20,583	20,583
Required System Input	359,294	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Supply Sources															
Lockhart Hydro Generation	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121	76,121
Pacolet Diesel Generation	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
Union Diesel Generation	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Purchases from Duke	283,118	309,765	309,765	309,765	309,765	309,765	309,765	309,765	309,765	309,765	309,765	309,765	309,765	309,765	309,765
Total Supply	359,294	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941	385,941

Note: Under the current Duke Energy PPA, the Pacolet and Union Diesel Generation stations are only operated in emergency situations.